



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,609	04/02/2004	David B. Finkenbinder	4570.94	9822

26360 7590 01/18/2007  
RENNER, KENNER, GREIVE, BOBAK, TAYLOR & WEBER  
FIRST NATIONAL TOWER FOURTH FLOOR  
106 S. MAIN STREET  
AKRON, OH 44308

EXAMINER

HAMO, PATRICK

ART UNIT PAPER NUMBER

3746

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/18/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/816,609

Applicant(s)

FINKENBINDER ET AL.

Examiner

Patrick Hamo

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06 July 2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "distal edge" of the noise suppression sleeve "curved inwardly to form a sleeve opening" and the "peripheral exhaust ports" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wentz, 5,567,127 in view of Morimoto et al., 5,219,648.

Wentz discloses a motor and fan unit 14, the fan coupled to the rotating shaft 82 of the motor and generating an airflow that passes over the motor (col. 1, ll. 20-34), the motor and fan encapsulated in a foam layer 16 or sleeve, a casing 12 or cover attached to the sleeve, the cover attached to the fan assembly at one end and an inwardly curved opening for the motor at the other end (fig. 1), the motor extending through the opening and part of the motor assembly contacting the sleeve (col. 9, ll. 29-32).

However, Wentz does not disclose the following taught by Morimoto: a melamine foam that absorbs sound and includes self-extinguishing flame properties for protection from heat and flame (col. 2, ll. 3-36).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Wentz with Morimoto in order to absorb sound and protect from heat and flame (col. 2, ll. 3-36).

Claims 1, 10-12, 16-18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finkenbinder et al., 6,703,754 in view of Wentz and further in view of Morimoto.

Finkenbinder '754 discloses a motor and fan unit 10, the fan 26 coupled to the rotating shaft 20 of the motor 16 and generating an airflow that passes over the motor, a diffuser/bracket assembly also receiving the shaft, the diffuser/bracket assembly comprising a fan end bracket 35 and a diffuser 90 coupled to the fan end bracket, the fan end bracket comprising a planar plate 36 having bracket openings 75 adjacent to the motor bracket and the fan end bracket having at least one motor bracket 37 for carrying the motor assembly, the diffuser having peripheral openings (fig. 13) and a fan shroud 30 with an inlet port 31 and peripheral exhaust ports 34 enclosing the fan and secured to the fan end bracket.

However, Finkenbinder '754 does not disclose the following taught by Wentz: the motor and fan encapsulated in a foam layer 16 or sleeve, a casing 12 or cover attached to the sleeve, the cover attached to the fan assembly at one end and including an inwardly curved opening for the motor at the other end (fig. 1), the motor extending through the opening and part of the motor assembly contacting part of the sleeve (col. 9, ll. 29-32), and a flange 94 that encourages a labyrinth air flow in order to absorb noise for quieter operation (Abstract, ll. 17-20).

Furthermore, neither Finkenbinder '754 nor Wentz teach the following taught by Morimoto: a melamine foam that absorbs sound and includes self-extinguishing flame properties for protection from heat and flame (col. 2, ll. 3-36).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Finkenbinder '754 with Wentz and Morimoto in

Art Unit: 3746

order to absorb noise for quieter operation (Wentz, Abstract, ll. 17-20) while also protecting the assembly from heat and fire damage (Morimoto, col. 2, ll. 3-36).

Claims 13-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 10-12 above in view of Parker et al., Pat. Pub. No. 2004/0165986.

The references as applied to claims 10-12 above teach all the limitations substantially as claimed except for the following taught by Parker: foam 1235 being disposed on the surfaces of the blades 1200 in order to reduce the noise from the diffuser and increase air flow performance of the rotating blades (p. 4, paragraph 0049).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the references as applied to claims 10-12 above with Parker in order to further reduce the noise of the assembly by reducing the noise from the diffuser and increase air flow performance of the rotating blades (p. 4, paragraph 0049).

Claims 16, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finkenbinder '754 in view of Wentz and further in view of Finkenbinder 6,439,843.

The references as applied to claims 16 and 21 above teach all the limitations substantially as claimed except for the following taught by Finkenbinder '843: a fan shroud 28 having a tangential exhaust port 220 to reduce the amount of turbulence and extraneous airflow (col. 6, ll. 43-50).

Art Unit: 3746

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the references as applied to claims 16 and 21 above with Finkenbinder '843 in order to reduce the amount of turbulence and extraneous airflow (col. 6, ll. 43-50).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Hamo whose telephone number is 571-272-3492. The examiner can normally be reached on M-F 8:30-5.

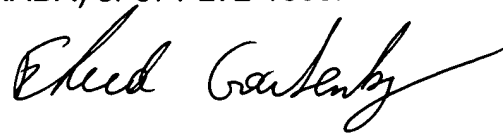
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on 571-272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PH

PH

200701012



EHUD GARTENBERG  
SUPERVISORY PATENT EXAMINER